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## REMARKS

The Applicants request reconsideration of the rejection.

Claims 2-7, 9-19, and 23-25 are now pending. Claims 1, 8

and 20-22 have been canceled without prejudice or disclaimer.

Claims 1-3, 6, 8-10, 13-14, and 16-22 were rejected under 35 U.S.C. §102(e) as being anticipated by Jain et al., U.S. 6,311,218 (Jain).

Each of the remaining claims contains a limitation requiring a message to be transmitted that indicates that a packet having incorrect user authentication information has been received if the user authentication information is determined to be incorrect (e.g., Claims 4 and 5) or if correct user authentication information cannot be obtained (e.g., Claims 11, 12, and 18), or that a message is sent when it is determined that user authentication information is incorrect (e.g., claim 19), or that a user name and authentication information do not correspond to an IP address (e.g., new claim 23). Thus, the anticipation rejection is avoided by rewriting or canceling all of the claims rejected over Jain taken alone.

Claims 4-5, 11-12, and 15 were rejected under 35 U.S.C. \$103(a) as being unpatentable over Jain in view of Guthrie et

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al., U.S. 6,161,185 (Guthrie). Guthrie was applied as teaching that an email is sent "to certain entities when authentication fails." In light of the amended claims as noted above, the Applicants address and traverse the application of Guthrie as follows.

The Examiner refers to the relevant portions of Guthrie (Column 10, line 39 through Column 11, line 17) to support the assertion that the prior art has known to provide the message as set forth in the claims and discussed above. Turning to Guthrie, however, the person of ordinary skill learns that the authentication and email notification taught by Guthrie pertains to the reporting of errors or other information helpful in identifying and repairing a problem relating to the failure of a user 114 to generate an appropriate response to a challenge value generated by a server 104. More particularly, Guthrie teaches that, if a current authorization request is not for system administration authentication, or a user's account corresponds to a SysAdmin account, the server 104 generates an 8-digit or character challenge value (challenge 126). The challenge 126 is a random value with modifications to ensure certain patterns do not appear.

The server 104 calculates an expected response value (response 130) based on a serial number 122 and Secure

Authentication DataBase (SADB) password 124 from a user's account table 200, and the challenge 126. Then, the server 104 sets a response valid timer, which is set to a short duration, such as two minutes. The response valid timer provides a limited duration within which the user 114 must generate the appropriate response.

The server 104 updates or writes the expected response value into a response record 214, and the response valid timer value in a response timer record 216 of the user's table 200. Then, the server 104 determines whether an error occurred in attempting to update the expected response record 214 and response timer 216. If the server 104 determines that an error had occurred (for example, if the server is currently experiencing an abnormally high number of authorization requests and therefore the server SADB 116 is overloaded), then the server returns an internal SADB error flag to the client 102.

In general, if the system fails to update the record or otherwise recognizes any external errors in the SADB system, the system notifies a system administrator or other support people. For example, the server 104 generates an email message to each of the appropriate support people to report the error and other information helpful identifying and

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repairing the problem. In addition, the server 104 can generate messages sent to the pagers of support or development people to immediately inform them of an unexpected failure. The page notification may be configurable and/or based on a type or level of failure, such that a low level of failure simply results in the logging of the failure, whereas a higher level of failure can result in the sending of an email or page in addition to the logging of the failure.

In contrast, the invention as claimed in Claim 4 requires that a user authenticating means operates to create a message indicating that a packet having incorrect user authentication information has been received by a network relaying apparatus if the user authentication information is determined to be incorrect for a source network address as a result of the user authentication. The user authenticating means then instructs packet communicating means to transmit the message to a contact mail address of the concerned user, which contact mail address is part of the user authentication information. Thus, Claim 4 is patentably distinguishable from the combination of Jain and Guthrie because Jain is recognized as containing no teaching relating to the sending of a message as claimed in Claim 4, and because Guthrie does not send a message to a contact mail address of a user, and does not send a message

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indicating that a packet having incorrect user authentication information has been received if the user authentication information is determined to be incorrect.

Claim 5 is thus also distinguishable in requiring that the user authenticating means operates to create a message indicating that a packet having incorrect user authentication information has been received by a network relaying apparatus if the user authentication is determined to be incorrect for the source network address as a result of user authentication, and to instruct packet communicating means to transmit the message to the contact mail address of an administrator.

Similarly, amended Claim 11 patentably defines over Jain in view of Guthrie in requiring a step of registering user authentication information and a contact mail address of a concerned user for each network address, and a step of, if correct user authentication information cannot be obtained from a first network terminal, transmitting to a contact mail address registered with a correspondence to the source network address, a message for indicating that a packet having incorrect user authentication information has been received.

Claim 12 also patentably defines over Jain in view of Guthrie in requiring that, if the correct user authentication information cannot be obtained from a first network terminal,

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a message indicating that a packet having incorrect user authentication information has been received, is transmitted to a contact mail address of the administrator of a network reeling apparatus.

New independent Claim 23 recites a network managing method in a network system that includes at least a network relaying apparatus having a plurality of ports coupled to terminals through communication lines, the method including a step of receiving a user name and authentication information sent from a terminal in response to a request for the user name and authentication information, and a step of sending a message when it is determined that the user name and the authentication information thus received do not correspond to a first IP address contained in a first packet received at a first portion of the plurality of ports, wherein the request for the user name and authentication information is made when the IP address does not coincide with the information stored in correspondence with the first port. Neither Jain nor Guthrie, nor any of the other references of record, teaches these features of new Claim 23.

Claim 7 was rejected under 35 U.S.C. §103(a) as being unpatentable over Jain in view of Malkin et al., "Portable Node Support Using Mobile IP Protocol" (Malkin). Claim 7 has

been amended to be dependent from Claim 4. Malkin is applied as teaching the use of mobile IP protocols, but neither teaches nor suggests the notification limitations discussed above, whether taken individually or in combination with Jain. Therefore, Claim 7 is also patentable.

In view of the foregoing amendments, remarks, and new claims, the Applicants request reconsideration of the rejection and allowance of the claims.

Respectfully submitted,

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